

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027979**Date Inspected:** 16-Jul-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** jobsite**CWI Name:** William Sherwood**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

At the start of the shift this Quality Assurance Inspector (QA) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) welding and Quality Control (QC) personnel. The observations and inspections were performed as noted below:

**13W/14W OBG Drop-In**

This QAI witnessed Damian LLamos of Spencer Mechanical welding a pipe support on to an angle that had previously been welded to the bridge deck plate at PP119.5-E5. Welder LLamos was performing the welding utilizing the Shield Metal Arc Welding Process with E7018 consumable electrodes to the parameters listed in the approved Welding Procedure Specification. This QAI observed QC Inspector Steve Jensen recording the welding operations at the standard intervals throughout the day. At the conclusion of welding operations this QAI performed a Visual Weld Inspection and found no rejectable discontinuities.

Upon observing Tran Chau setting up to continue welding operations on longitudinal stiffeners 120.6 LS-1, and LS-2 it was discovered that the Contractor had neglected to maintain the minimum preheat temperature since the ceasing of welding operations on July 10, 2012. This omission put them in direct violation of The State of California Department of Transportation Special Project Provisions Dated 5/25/2006 Section 10-1.59 Steel Structures which states; for welds with required preheat greater than 65C the min. preheat temperature shall be maintained continuously from beginning to three hours after the completion of the entire weld, even if welding is interrupted. The non-compliance was promptly reported to Mr. William Sherwood ABF Quality Control who had discovered the oversight only moments before. This QAI issued a Incident Report and distributed as directed to

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## WELDING INSPECTION REPORT

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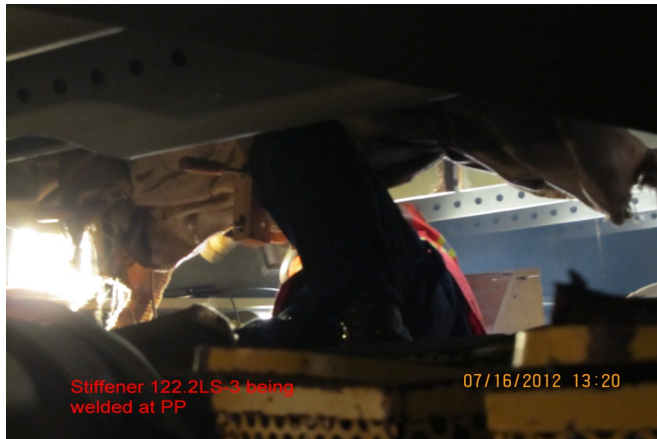
the proper parties.

This QAI observed Welder Jeremy Doleman using a rosebud torch to preheat stiffener splice 122.2 LS-3 to a QC recorded, QA verified temperature of 200F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC William Sherwood recording preheat temperature whenever there was a stop in work.

QAI witnessed the welding of stiffener splice 122.2 LS-3 by welder Jeremy Doleman (ID#5042) utilizing the Shield Metal Arc Welding Process in the 3G position using E9018 consumable electrodes. The QC recorded and this QAI verified that the weld metal was being deposited to the parameters of the applicable Welding Procedure Specification. Welder Doleman was observed using the stringer method and good workmanship practices in regard to interpass cleaning.

This QAI observed Welder Tran Chau using a rosebud torch to preheat stiffener splice 120.6 LS-1, and LS-2 to a QC recorded, QA verified temperature of 200F. Preheat temperature was measured using a Tempil Stick. This QAI noted QC William Sherwood recording preheat temperature whenever there was a stop in work.

QAI witnessed the welding of stiffener splice 120.6 LS-1, and LS-2 by welder Tran Chau utilizing the Shield Metal Arc Welding Process in the 3G position using E9018 consumable electrodes. The QC recorded and this QAI verified that the weld metal was being deposited to the parameters of the applicable Welding Procedure Specification. Welder Chau was observed using the stringer method and good workmanship practices in regard to interpass cleaning. The welding is completed on these two splices.



### Summary of Conversations:

There were general conversations with Quality Control Inspector William Sherwood, at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift. All observations were relayed to Bill Levell.

### Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510 385 5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Daggett,Matt	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

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